

Morbidity and medical utilization of Interstitial Cystitis/Painful Bladder Syndrome in Taiwan

-A nationwide population-based study



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Hypothesis / Aim of study :

The morbidity (incidence and prevalence) of IC/PBS varies greatly depends on the definition of studies among distinctive areas. Contradictory findings exist among these available reports. We calculated the morbidity rate and medical utilization of IC/PBS over twelve years using a nationwide database of Taiwan.

Study design, materials and methods :

This was a cohort study of the Longitudinal Health Insurance Database 2010 with new diagnoses of IC/PBS from 2002 through 2013. The morbidity rate was adjusted for age, sex, and calendar date using density methods. Moreover, medical utilization during the study period was measured.

Inclusion criteria for IC/PBS: Diagnosis with ICD code 595.1 at least once in the LHID2010, age ≥ 18 years, first date was before 2002.

Incidence = Number of new IC/PBS cases each year \div Number of people observed in the population each year

Yearly Prevalence = Number of new IC/PBS cases that occurred within two years \div Number of people observed in the population each year

Surgery fees: fee for cystoscope-hydrodistention;

Total fee: includes drug, non-drug and procedure or surgery fee

Results:

It was observed that the incidence of IC/PBS was 21.8/100,000 in 2002 and 21.1/100,000 in 2013. The prevalence of IC/PBS was 21.8/100,000 in 2002 and 40.2/100,000 in 2013. In 2003, the incidence and prevalence of females was 28.6/100,000 and 63.5/100,000, respectively. The incidence and prevalence of males was 12.3/100,000 and 19.4/100,000, respectively. In 2002, the incidence was 45.5/100,000, 32.4/100,000, and 9/100,000 in ages above 65, 40-65 and under 40 years, respectively. The prevalence in 2003 was 86.3/100,000, 63.1/100,000, and 16.4/100,000 in ages above 65, 40-65 and under 40 years, respectively. This pattern was similar until 2013. The mean outpatient and inpatient visit time was 4.8 and 1.8 times per year, respectively. The mean surgical fee (US\$ 246.6 ± 304.5) was 23.6% of the total fee.

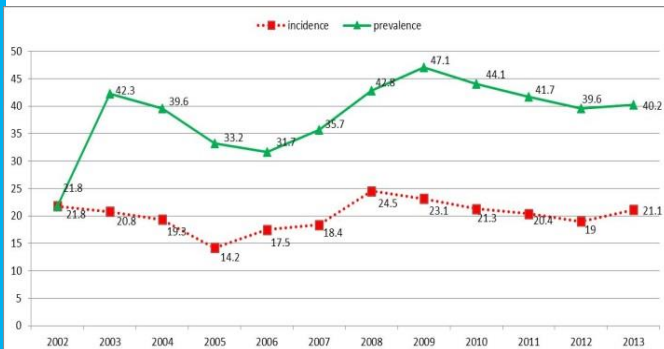


Figure 1. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002-2013 in LHID 2010 (per 100,000)

IC/PBS Interstitial Cystitis / Bladder Pain Syndrome; LHID 2010; Longitudinal Health Insurance Database 2010

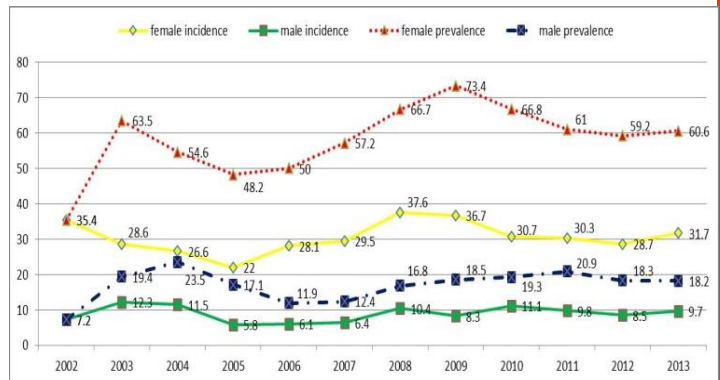


Figure 2. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002-2013 (by sex) in LHID 2010 (per 100,000)

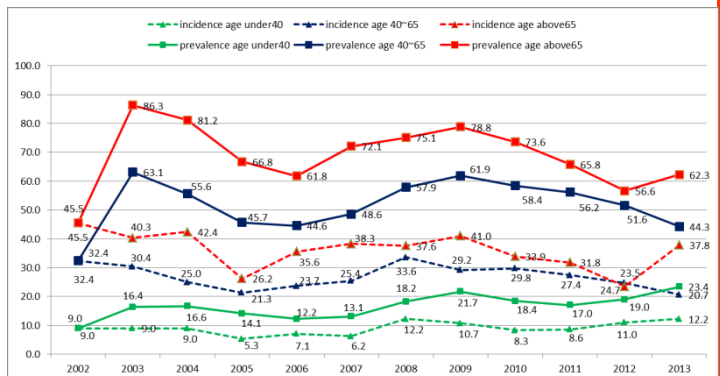


Figure 3. Interstitial Cystitis / Painful Bladder Syndrome incidence and prevalence between 2002-2013 (by age) in LHID 2010 (per 100,000)

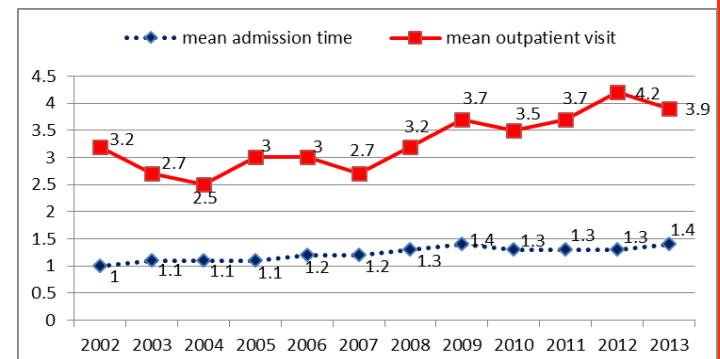


Figure 4. Distribution of hospitalizations and outpatient visits for IC/PBS patients between 2002-2013 in LHID 2010

Table. Surgery fees (US\$) and percentages between 2002-2013 in LHID 2010 (n=269)

variables	Mean	sd	min	median	max.
Surgery fee	248	302	0	138	1470
Total fee	1241	2090	4	703	24599
Percentage	23.6	18.5	0	24.3	67.1

Conclusion :

The morbidity rate of IC/PBS showed a higher incidence and prevalence in females and older patients during our study period (2002-2013). The use of a new drug for treatment of IC/PBS is a factor of the peak in the morbidity rate of IC/PBS. The increase in medical utilization could be explained by the awareness of physicians and patients seeking for medical help. Research to identify IC/PBS patients is an important step in motivating patients' willingness to obtain medical help.